

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of fabricating a cartilage implant comprising:  
embedding chondrocytes or mesenchymal stem cells in a three-dimensional substrate, the  
substrate containing randomly rewound  $\alpha$ -helical monomers ~~[[of]]~~ from partially digested type I  
collagen; and  
growing the chondrocytes or mesenchymal stem cells in the substrate;  
thereby producing a cartilage implant.
2. (Currently amended) The method of claim 1, wherein the substrate further  
contains randomly rewound  $\alpha$ -helical monomers ~~[[of]]~~ from partially digested type II collagen.
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Original) The method of claim 2, wherein the chondrocytes or mesenchymal  
stem cells, the type I collagen, and the type II collagen are prepared from two or three different  
animal sources.
7. (Currently amended) The method of claim 2, wherein, during the growing step,  
the chondrocytes or mesenchymal stem cells and the substrate are placed in a rotating and  
oscillating vessel.

8. (Canceled)
9. (Original) The method of claim 1, wherein the chondrocytes or mesenchymal stem cells and the type I collagen are each prepared from a different animal source.
10. (Currently amended) The method of claim 1, wherein, during the growing step, the chondrocytes or mesenchymal stem cells and the substrate are placed in a rotating and oscillating vessel.
11. (Currently amended) A method of fabricating a cartilage implant comprising:  
embedding chondrocytes in a three-dimensional substrate, the substrate containing randomly rewound  $\alpha$ -helical monomers ~~[[of]]~~ from partially digested type I collagen; and  
growing the chondrocytes in the substrate;  
thereby producing a cartilage implant.
12. (Currently amended) The method of claim 11, wherein the substrate further contains randomly rewound  $\alpha$ -helical monomers ~~[[of]]~~ from partially digested type II collagen.
13. (Canceled)
14. (Canceled)
15. (Canceled)

16. (Currently amended) A cartilage implant comprising:  
chondrocytes; and  
a three-dimensional matrix, the matrix containing randomly rewound  $\alpha$ -helical monomers ~~[[of]]~~ from partially digested type I collagen;  
wherein the chondrocytes are embedded in the matrix.

17. (Currently amended) The cartilage implant of claim 16, wherein the matrix further contains randomly rewound  $\alpha$ -helical monomers ~~[[of]]~~ from partially digested type II collagen.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Original) The cartilage implant of claim 17, wherein the chondrocytes, the type I collagen, and the type II collagen are prepared from two or three different animal sources.

22. (Canceled)

23. (Currently amended) The cartilage implant of claim ~~[[22]]~~ 16, wherein the chondrocytes and the type I collagen are each prepared from a different animal source

24. (Original) The cartilage implant of claim 16, wherein the chondrocytes and the type I collagen are each prepared from a different animal source.